

44. Contactless electrical energy transfer apparatus comprising:

(a) a portable device that includes:

(i) a receiver coil disposed in a receiver housing; and

(ii) a main housing in which electronic components of the portable device are disposed, said receiver housing extending outwardly from said main housing such that said receiver housing and receiver coil are substantially distinct from said main housing; and

(b) a flux generator including:

(i) a base adapted to be disposed proximate to the portable device, said base comprising a cradle section and a charging section, said cradle section receiving said main housing and said charging section receiving said receiver housing when the portable device is receiving energy;

(ii) a magnetic field generator disposed within the base for the flux generator and comprising at least one permanent magnet and a flux shunt, said at least one permanent magnet being fixed relative to the receiver coil; and

(iii) a prime mover that is drivingly coupled to said flux shunt, said flux shunt being moved by the prime mover, to intermittently pass adjacent to pole faces of said at least one permanent magnet so as to provide a magnetic flux shunt path between the pole faces, thereby varying a magnetic field experienced by the receiver coil, inducing an electrical current to flow in the receiver coil, said varying magnetic field being generally directed away from said main housing.

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45. The energy transfer apparatus of Claim ~~48~~, wherein said charging section comprises means for gripping said receiver coil.

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46. The energy transfer apparatus of Claim ~~48~~, further comprising a plurality of cradle sections and a plurality of charging sections, each cradle section being associated with at least one charging section, said plurality of charging sections being disposed adjacent a central core of said base.

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